Calendar No. 352

111TH CONGRESS 2D SESSION

S. 1660

[Report No. 111-169]

To amend the Toxic Substances Control Act to reduce the emissions of formaldehyde from composite wood products, and for other purposes.

IN THE SENATE OF THE UNITED STATES

SEPTEMBER 10, 2009

Ms. Klobuchar (for herself, Mr. Crapo, Mr. Risch, Mr. Gregg, Ms. Landrieu, Ms. Murkowski, Mr. Tester, Mrs. Shaheen, Mr. Isakson, Mr. Vitter, Mrs. Feinstein, Mr. Begich, Mr. Cochran, Mr. Bayh, Mr. Brownback, Mr. Alexander, Mr. Corker, Mr. Lieberman, Mr. Durbin, and Mrs. Boxer) introduced the following bill; which was read twice and referred to the Committee on Environment and Public Works

April 19, 2010

Reported by Mr. Reid (for Mrs. Boxer), with an amendment [Strike out all after the enacting clause and insert the part printed in italic]

A BILL

To amend the Toxic Substances Control Act to reduce the emissions of formaldehyde from composite wood products, and for other purposes.

- 1 Be it enacted by the Senate and House of Representa-
- 2 tives of the United States of America in Congress assembled,

1	SECTION 1. SHORT TITLE.
2	This Act may be cited as the "Formaldehyde Stand-
3	ards for Composite Wood Products Act".
4	SEC. 2. FORMALDEHYDE STANDARDS FOR COMPOSITE
5	WOOD PRODUCTS.
6	(a) Amendment.—The Toxic Substances Control
7	Act (15 U.S.C. 2601 et seq.) is amended by adding at
8	the end the following:
9	"TITLE VI—FORMALDEHYDE
10	STANDARDS FOR COMPOSITE
11	WOOD PRODUCTS
12	"SEC. 601. FORMALDEHYDE STANDARDS.
13	"(a) Definitions.—In this section:
14	"(1) Finished Good.—
15	"(A) IN GENERAL.—The term 'finished
16	good' means any good or product (other than a
17	panel) containing—
18	"(i) hardwood plywood;
19	"(ii) particleboard; or
20	"(iii) medium-density fiberboard.
21	"(B) Inclusions.—The term 'finished
22	good' includes—
23	"(i) manufactured housing; and
24	"(ii) recreational vehicles.
25	"(C) Exclusions.—The term 'finished
26	good' does not include—

1	"(i) any component part or other part
2	used in the assembly of a finished good; or
3	"(ii) any finished good that has pre-
4	viously been sold or supplied to an indi-
5	vidual or entity that purchased or acquired
6	the finished good in good faith for pur-
7	poses other than resale, such as—
8	"(I) an antique; or
9	"(II) secondhand furniture.
10	"(2) Hardwood Plywood.—
11	"(A) IN GENERAL.—The term 'hardwood
12	plywood' means a hardwood or decorative panel
13	that is—
14	"(i) intended for interior use; and
15	"(ii) composed of (as determined
16	under the standard numbered ANSI/
17	$\frac{\text{HPVA HP-}1-2004}{\text{Or a successor stand}}$
18	ard)) an assembly of layers or plies of ve-
19	neer, joined by an adhesive with—
20	"(I) lumber core;
21	"(II) particleboard core;
22	"(III) medium-density fiberboard
23	core;
24	"(IV) hardboard core; or

1	"(V) any other special core or
2	special back material.
3	"(B) Exclusions.—The term 'hardwood
4	plywood' does not include—
5	"(i) a laminated product;
6	"(ii) military-specified plywood;
7	"(iii) curved plywood; or
8	"(iv) any other product specified in—
9	"(I) the standard entitled 'Vol-
10	untary Product Standard-Structural
11	Plywood' and numbered PS 1-07 (or
12	a successor standard); or
13	"(II) the standard entitled 'Vol-
14	untary Product Standard-Perform-
15	ance Standard for Wood-Based Strue-
16	tural-Use Panels' and numbered PS
17	2–04 (or a successor standard).
18	"(3) Laminated Product.—The term 'lami-
19	nated product' means a product—
20	"(A) in which a wood veneer is affixed
21	to
22	"(i) a particleboard platform;
23	"(ii) a medium-density fiberboard
24	platform; or
25	"(iii) a veneer-core platform; and

1	"(B) that is—
2	"(i) a component part;
3	"(ii) used in the construction or as-
4	sembly of a finished good; and
5	"(iii) produced by the manufacturer
6	or fabricator of the finished good in which
7	the product is incorporated.
8	"(4) Medium-density fiberboard.—The
9	term 'medium-density fiberboard' means a panel
10	composed of cellulosic fibers made by dry forming
11	and pressing a resinated fiber mat (as determined
12	under the standard numbered ANSI A208.2-2009
13	(or a successor standard)).
14	"(5) No-added formaldehyde-based
15	RESIN.—
16	"(A) IN GENERAL.—The term 'no-added
17	formaldehyde-based resin' means a resin formu-
18	lated with no added formaldehyde as part of the
19	resin cross-linking structure that meets the per-
20	formance standard contained in section
21	93120.3(e) of title 17, California Code of Regu-
22	lations (as in effect on July 28, 2009).
23	"(B) INCLUSIONS.—The term 'no-added
24	formaldehyde-based resin' may include any
25	resin made from—

1	<u>"(i)</u> soy;
2	"(ii) polyvinyl acetate; or
3	"(iii) methylene diisocyanate.
4	"(6) Particleboard.—
5	"(A) IN GENERAL.—The term
6	'particleboard' means a panel composed of cel-
7	lulosic material in the form of discrete particles
8	(as distinguished from fibers, flakes, or
9	strands) that are pressed together with resin
10	(as determined under the standard numbered
11	ANSI A208.1–2009 (or a successor standard)).
12	"(B) EXCLUSIONS.—The term
13	'particleboard' does not include any product
14	specified in the standard entitled 'Voluntary
15	Product Standard-Performance Standard for
16	Wood-Based Structural-Use Panels' and num-
17	bered PS 2–04 (or a successor standard).
18	"(7) Ultra Low-Emitting Formaldehyde
19	RESIN.—
20	"(A) IN GENERAL.—The term 'ultra low-
21	emitting formaldehyde resin' means a resin for-
22	mulated using a process the average formalde-
23	hyde emissions of which are consistently below
24	the phase 2 emission standards contained in the
25	airborne toxic control measure for composite

1	wood products described in section 93120.3(d)
2	of title 17, California Code of Regulations (as
3	in effect on July 28, 2009).
4	"(B) INCLUSIONS.—The term 'ultra low-
5	emitting formaldehyde resin' may include—
6	"(i) melamine-urea-formaldehyde
7	resin;
8	"(ii) phenol formaldehyde resin; and
9	"(iii) resorcinol formaldehyde resin.
10	"(b) Requirement.—
11	"(1) In General.—Except as provided in sub-
12	section (d), effective beginning on the date that is
13	180 days after the date of enactment of this section,
14	the formaldehyde emission standard contained in
15	table 1 of section 93120.2(a) of title 17, California
16	Code of Regulations (relating to an airborne toxic
17	control measure to reduce formaldehyde emissions
18	from composite wood products) (as in effect on July
19	28, 2009), shall apply to hardwood plywood, me-
20	dium-density fiberboard, and particleboard sold, sup-
21	plied, offered for sale, or manufactured in the
22	United States.
23	"(2) Applicability.—The formaldehyde emis-
24	sion standard referred to in paragraph (1) shall
25	apply regardless of whether an applicable hardwood

1	plywood, medium-density fiberboard, or
2	particleboard is—
3	"(A) in the form of an unfinished panel; or
4	"(B) incorporated into a finished good.
5	"(e) Exemptions.—The formaldehyde emission
6	standard referred to in subsection (b)(1) shall not apply
7	to
8	"(1) hardboard;
9	"(2) structural plywood, as specified in the
10	standard entitled 'Voluntary Product Standard-
11	Structural Plywood' and numbered PS 1–07 (or a
12	successor standard);
13	"(3) structural panels, as specified in the stand-
14	ard entitled 'Voluntary Product Standard-Perform-
15	ance Standard for Wood-Based Structural-Use Pan-
16	els' and numbered PS 2-04 (or a successor stand-
17	$\frac{\text{ard}}{\text{c}}$;
18	"(4) structural composite lumber, as specified
19	in the standard entitled 'Standard Specification for
20	Evaluation of Structural Composite Lumber Prod-
21	uets' and numbered ASTM D $5456-06$ (or a suc-
22	cessor standard);
23	"(5) oriented strand board;
24	"(6) glued laminated lumber, as specified in the
25	standard entitled 'Structural Clued Laminated Tim-

1	ber' and numbered ANSI A190.1-2002 (or a suc-
2	cessor standard);
3	"(7) prefabricated wood I-joists, as specified in
4	the standard entitled 'Standard Specification for Es-
5	tablishing and Monitoring Structural Capacities of
6	Prefabricated Wood I-Joists' and numbered ASTM
7	D 5055-05 (or a successor standard);
8	"(8) finger-jointed lumber;
9	"(9) wood packaging (including pallets, crates
10	spools, and dunnage); or
11	"(10) composite wood products used inside new
12	vehicles (as defined in section 430 of the California
13	Vehicle Code) (excluding recreational vehicles), rail
14	ears, boats, aerospace eraft, or aircraft.
15	"(d) REGULATIONS.—
16	"(1) In General.—Not later than January 1,
17	2011, the Administrator shall promulgate regula-
18	tions to implement the formaldehyde emission stand-
19	ard required under subsection (b) in a manner that
20	ensures that compliance with the standard is equiva-
21	lent to compliance with the standard contained in
22	table 1 of goation 02120.2(a) of title 17. California

Code of Regulations (as in effect on July 28, 2009).

23

1	"(2) Inclusions.—The regulations promul-
2	gated pursuant to paragraph (1) shall include provi-
3	sions relating to—
4	"(A) labeling;
5	"(B) chain of custody requirements;
6	"(C) sell-through provisions;
7	"(D) ultra low-emitting formaldehyde res-
8	ins;
9	"(E) no-added formaldehyde-based resins;
10	"(F) finished goods;
11	"(G) third-party testing and certification;
12	"(H) auditing and reporting of third-party
13	certifiers;
14	"(I) recordkeeping; and
15	"(J) enforcement.
16	"(3) Import regulations.—Not later than
17	July 1, 2011, the Administrator, in coordination
18	with the Commissioner of Customs and Border Pro-
19	tection and other appropriate Federal departments
20	and agencies, shall revise regulations promulgated
21	pursuant to section 13 as the Administrator deter-
22	mines to be necessary to ensure compliance with this
23	section.
24	"(4) Modification of Standards.—The Ad-
25	ministrator may modify, by regulation, any reference

- 1 to an industry standard contained in this subsection
- 2 if the standard is subsequently updated.
- 3 "(e) Prohibited Acts.—An individual or entity
- 4 that violates any requirement under this section (including
- 5 any regulation promulgated pursuant to subsection (d))
- 6 shall be considered to have committed a prohibited act
- 7 under section 15.".
- 8 (b) Conforming Amendment.—The table of con-
- 9 tents of the Toxic Substances Control Act (15 U.S.C. prec.
- 10 2601) is amended by adding at the end the following:

"TITLE VI—FORMALDEHYDE STANDARDS FOR COMPOSITE WOOD PRODUCTS

"Sec. 601. Formaldehyde standards.".

11 SEC. 3. REPORTS TO CONGRESS.

- 12 Not later than December 31, 2010, and annually
- 13 thereafter through December 31, 2014, the Administrator
- 14 of the Environmental Protection Agency shall submit to
- 15 the Committee on Environment and Public Works of the
- 16 Senate and the Committee on Energy and Commerce of
- 17 the House of Representatives a report describing, with re-
- 18 spect to the preceding calendar year—
- 19 (1) the status of the measures carried out or
- 20 planned to be earried out pursuant to title VI of the
- 21 Toxic Substances Control Act; and

1	(2) the extent to which relevant industries have
2	achieved compliance with the requirements under
3	that title.
4	SECTION 1. SHORT TITLE.
5	This Act may be cited as the "Formaldehyde Stand-
6	$ards \ for \ Composite \ Wood \ Products \ Act".$
7	SEC. 2. FORMALDEHYDE STANDARDS FOR COMPOSITE
8	WOOD PRODUCTS.
9	(a) Amendment.—The Toxic Substances Control Act
10	(15 U.S.C. 2601 et seq.) is amended by adding at the end
11	the following:
12	"TITLE VI—FORMALDEHYDE
13	STANDARDS FOR COMPOSITE
14	WOOD PRODUCTS
15	"SEC. 601. FORMALDEHYDE STANDARDS.
16	"(a) DEFINITIONS.—In this section:
17	"(1) Finished good.—
18	"(A) In GENERAL.—The term finished
19	good' means any good or product (other than a
20	panel) containing—
21	"(i) hardwood plywood;
22	"(ii) particleboard; or
23	"(iii) medium-density fiberboard.
24	"(B) Exclusions.—The term finished
25	good' does not include—

1	"(i) any component part or other part
2	used in the assembly of a finished good; or
3	"(ii) any finished good that has pre-
4	viously been sold or supplied to an indi-
5	vidual or entity that purchased or acquired
6	the finished good in good faith for purposes
7	other than resale, such as—
8	"(I) an antique; or
9	$``(II)\ second hand\ furniture.$
10	"(2) Hardboard.—The term 'hardboard' means
11	a composite panel composed of cellulosic fibers manu-
12	factured with a wet process using—
13	"(A) no resins; or
14	"(B) resins that have no added formalde-
15	hyde.
16	"(3) Hardwood Plywood.—
17	"(A) In GENERAL.—The term 'hardwood
18	plywood' means a hardwood or decorative panel
19	that is—
20	"(i) intended for interior use; and
21	"(ii) composed of (as determined under
22	the standard numbered ANSI/HPVA HP-
23	1–2004 (or a successor standard)) an as-
24	sembly of layers or plies of veneer, joined by
25	an adhesive with—

1	"(I) lumber core;
2	"(II) particleboard core;
3	"(III) medium-density fiberboard
4	core;
5	"(IV) hardboard core; or
6	"(V) any other special core or spe-
7	cial back material.
8	"(B) Exclusions.—The term hardwood
9	plywood' does not include—
10	"(i) military-specified plywood;
11	"(ii) curved plywood; or
12	"(iii) any other product specified in—
13	"(I) the standard entitled 'Vol-
14	untary Product Standard-Structural
15	Plywood' and numbered PS 1–07 (or a
16	successor standard); or
17	"(II) the standard entitled Vol-
18	untary Product Standard-Performance
19	Standard for Wood-Based Structural-
20	Use Panels' and numbered PS 2-04
21	(or a successor standard).
22	"(C) Laminated products.—
23	"(i) In General.—The Administrator
24	shall conduct a rulemaking process pursu-
25	ant to subsection (d) that uses all available

1	and relevant information from State au-
2	thorities (including the California Air Re-
3	sources Board), industry, and other avail-
4	able sources of such information, and ana-
5	lyzes such information to determine, at the
6	discretion of the Administrator, whether the
7	definition of hardwood plywood should ex-
8	empt any laminated product. The Adminis-
9	trator may also modify any aspect of the
10	definition contained in clause (ii) before in-
11	cluding it in such regulations.
12	"(ii) Laminated product.—The term
13	'laminated product' means a product—
14	"(I) in which a wood veneer is af-
15	fixed to—
16	"(aa) a particleboard plat-
17	form;
18	"(bb) a medium-density fi-
19	berboard platform; or
20	"(cc) a veneer-core platform;
21	and
22	"(II) that is—
23	"(aa) a component part:

1	"(bb) used in the construc-
2	tion or assembly of a finished
3	good; and
4	"(cc) produced by the manu-
5	facturer or fabricator of the fin-
6	ished good in which the product is
7	incorporated.
8	"(4) Medium-density fiberboard.—The term
9	'medium-density fiberboard' means a panel composed
10	of cellulosic fibers made by dry forming and pressing
11	a resinated fiber mat (as determined under the stand-
12	ard numbered ANSI A208.2–2009 (or a successor
13	standard)).
14	"(5) NO-ADDED FORMALDEHYDE-BASED
15	RESIN.—
16	"(A) In General.—The term 'no-added
17	formaldehyde-based resin' means a resin formu-
18	lated with no added formaldehyde as part of the
19	resin cross-linking structure that meets the per-
20	formance standard contained in section
21	93120.3(c) of title 17, California Code of Regula-
22	tions (as in effect on July 28, 2009).
23	"(B) Inclusions.—The term 'no-added
24	formaldehyde-based resin' may include any resin
25	made from—

1	"(i) soy;
2	"(ii) polyvinyl acetate; or
3	"(iii) methylene diisocyanate.
4	"(6) Particleboard.—
5	"(A) IN GENERAL.—The term
6	'particleboard' means a panel composed of cellu-
7	losic material in the form of discrete particles
8	(as distinguished from fibers, flakes, or strands)
9	that are pressed together with resin (as deter-
10	mined under the standard numbered ANSI
11	$A208.1-2009 \ (or \ a \ successor \ standard)).$
12	(B) Exclusions.—The term
13	'particleboard' does not include any product
14	specified in the standard entitled Voluntary
15	Product Standard-Performance Standard for
16	Wood-Based Structural-Use Panels' and num-
17	bered PS 2-04 (or a successor standard).
18	"(7) Ultra low-emitting formaldehyde
19	RESIN.—
20	"(A) In general.—The term 'ultra low-
21	emitting formaldehyde resin' means a resin for-
22	mulated using a process the average formalde-
23	hyde emissions of which are consistently below
24	the phase 2 emission standards contained in the
25	airborne toxic control measure for composite

1	wood products described in section 93120.3(d) of
2	title 17, California Code of Regulations (as in ef-
3	fect on July 28, 2009).
4	"(B) Inclusions.—The term 'ultra low-
5	emitting formaldehyde resin' may include—
6	"(i) melamine-urea-formaldehyde
7	resin;
8	"(ii) phenol formaldehyde resin; and
9	"(iii) resorcinol formaldehyde resin.
10	"(b) Requirement.—
11	"(1) In general.—Except as provided in an
12	applicable sell-through regulation promulgated pursu-
13	ant to subsection (d), effective beginning on the date
14	that is 180 days after the date of promulgation of
15	those regulations, the formaldehyde emission standard
16	contained in table 1 of section 93120.2(a) of title 17,
17	California Code of Regulations (relating to an air-
18	borne toxic control measure to reduce formaldehyde
19	emissions from composite wood products) (as in effect
20	on July 28, 2009), shall apply to hardwood plywood,
21	medium-density fiberboard, and particleboard sold,
22	supplied, offered for sale, or manufactured in the
23	United States.
24	"(2) Applicability.—The formaldehyde emis-
25	sion standard referred to in paragraph (1) shall

1	apply regardless of whether an applicable hardwood
2	plywood, medium-density fiberboard, or particleboard
3	is—
4	"(A) in the form of an unfinished panel; or
5	"(B) incorporated into a finished good.
6	"(c) Exemptions.—The formaldehyde emission stand-
7	ard referred to in subsection (b)(1) shall not apply to—
8	"(1) hardboard;
9	"(2) structural plywood, as specified in the
10	standard entitled Voluntary Product Standard-
11	Structural Plywood' and numbered PS 1-07 (or a
12	$successor\ standard);$
13	"(3) structural panels, as specified in the stand-
14	ard entitled Voluntary Product Standard-Perform-
15	ance Standard for Wood-Based Structural-Use Pan-
16	els' and numbered PS 2-04 (or a successor standard),
17	"(4) structural composite lumber, as specified in
18	the standard entitled 'Standard Specification for
19	Evaluation of Structural Composite Lumber Prod-
20	ucts' and numbered ASTM D 5456–06 (or a successor
21	standard);
22	"(5) oriented strand board;
23	"(6) glued laminated lumber, as specified in the
24	standard entitled 'Structural Glued Laminated Tim-

1	ber' and numbered ANSI A190.1–2002 (or a successor
2	standard);
3	"(7) prefabricated wood I-joists, as specified in
4	the standard entitled 'Standard Specification for Es-
5	tablishing and Monitoring Structural Capacities of
6	Prefabricated Wood I-Joists' and numbered ASTM D
7	5055–05 (or a successor standard);
8	"(8) finger-jointed lumber;
9	"(9) wood packaging (including pallets, crates,
10	spools, and dunnage); or
11	"(10) composite wood products used inside new
12	vehicles (as defined in section 430 of the California
13	Vehicle Code) (excluding recreational vehicles), rail
14	cars, boats, aerospace craft, or aircraft.
15	"(d) Regulations.—
16	"(1) In general.—Not later than July 1, 2012,
17	the Administrator shall promulgate regulations to im-
18	plement the formaldehyde emission standard required
19	under subsection (b) in a manner that ensures that
20	compliance with the standard is equivalent to compli-
21	ance with the standard contained in table 1 of section
22	93120.2(a) of title 17, California Code of Regulations
23	(as in effect on July 28, 2009).

1	"(2) Inclusions.—The regulations promulgated
2	pursuant to paragraph (1) shall include provisions
3	relating to—
4	"(A) labeling;
5	"(B) chain of custody requirements;
6	"(C) sell-through provisions;
7	"(D) ultra low-emitting formaldehyde res-
8	ins;
9	$\lq\lq(E)$ no-added formaldehyde-based resins;
10	"(F) finished goods;
11	"(G) third-party testing and certification;
12	"(H) auditing and reporting of third-party
13	certifiers;
14	$``(I)\ record keeping;$
15	"(J) enforcement; and
16	"(K) laminated products.
17	"(3) Import regulations.—Not later than
18	July 1, 2012, the Administrator, in coordination with
19	the Commissioner of Customs and Border Protection
20	and other appropriate Federal departments and agen-
21	cies, shall revise regulations promulgated pursuant to
22	section 13 as the Administrator determines to be nec-
23	essary to ensure compliance with this section.
24	"(4) Modification of Standards.—The Ad-
25	ministrator may modify, by regulation, any reference

- 1 to an industry standard contained in this subsection
- 2 if the standard is subsequently updated.
- 3 "(e) Prohibited Acts.—An individual or entity that
- 4 violates any requirement under this section (including any
- 5 regulation promulgated pursuant to subsection (d)) shall be
- 6 considered to have committed a prohibited act under section
- 7 15.".
- 8 (b) Conforming Amendment.—The table of contents
- 9 of the Toxic Substances Control Act (15 U.S.C. prec. 2601)
- 10 is amended by adding at the end the following:

"TITLE VI—FORMALDEHYDE STANDARDS FOR COMPOSITE WOOD PRODUCTS

"Sec. 601. Formaldehyde standards.".

11 SEC. 3. REPORTS TO CONGRESS.

- 12 Not later than December 31, 2010, and annually there-
- 13 after through December 31, 2014, the Administrator of the
- 14 Environmental Protection Agency shall submit to the Com-
- 15 mittee on Environment and Public Works of the Senate and
- 16 the Committee on Energy and Commerce of the House of
- 17 Representatives a report describing, with respect to the pre-
- 18 ceding calendar year—
- 19 (1) the status of the measures carried out or
- 20 planned to be carried out pursuant to title VI of the
- 21 Toxic Substances Control Act; and

1	(2) the extent to which relevant industries have
2	achieved compliance with the requirements under that
3	title.
4	SEC. 4. MODIFICATION OF REGULATION.
5	Not later than 180 days after the date on which the
6	Administrator of the Environmental Protection Agency
7	promulgates regulations under section 601(d)(1) of the
8	Toxic Substances Control Act (as added by section 2(a)),
9	the Secretary of Housing and Urban Development shall up-
10	date the regulation contained in section 3280.308 of title
11	24, Code of Federal Regulations (as in effect on the date
12	of enactment of this Act), to ensure that the regulation re-

13 flects the standards established by section 601 of the Toxic

14 Substances Control Act (as so added).

Calendar No. 352

111TH CONGRESS S. 1660

[Report No. 111-169]

A BILL

To amend the Toxic Substances Control Act to reduce the emissions of formaldehyde from composite wood products, and for other purposes.

APRIL 19, 2010

Reported with an amendment